

Timur Dogan

90 Ellery St.

Apartment 32

Cambridge MA 02138

United States

tkdogan@mit.edu

Tel: +1 857 207-9669

www.timurdogan.de

www.archsim.com

www.urbanmodeling.net

Education

- since 2012* P.h.D. candidate at MIT, Building Technology
Research area: Urban and early design energy modeling.
- 2010 - 2012* Master in Design Studies at Harvard Graduate School of Design
Research area: Accelerated large scale daylight simulations for urban and early design
- 2010* Diploma in architecture with distinction for remarkable program achievements at TU Darmstadt (Dipl.-Ing., Ø 1.0)
Area of concentration: Sustainable residential architecture, building in historic context, light surface-active structures
- 2004* Begin of my studies in architecture at TU Darmstadt
- 2004* Abitur (Ø 1.9), Georg Büchner Schule

Professional Experience

- since 2011* Employment at Transsolar Energie Technik, München
- 2010* Employment at Wandel Hoefer Lorch Architekten GmbH
- 2008-2009* Prosa Architektur & Grafik, Darmstadt
- 2009* Architekten NKBAK, Frankfurt
- 2009* Employment at „Generalist“ (magazine for architecture and culture)
- 2007* Internship and employment at KSP Engel Zimmermann in Frankfurt

Awards

- 2013* First price, design competition, “Bürgerbrunnen für Wilhelmsplatz, Offenbach”
- 2012* MIT Presidential Fellow
- 2012* Fellowship Transsolar Energietechnik GmbH. Partial funding of my PhD position.
- 2011* DAAD Fellowship for graduate studies
- 2010* Distinction for remarkable program achievements of TU Darmstadt
- 2009* Jakob Wilhelm Mengler-Award, for the project “Eins40”
- 2009* First price, Implenia design competition “Rüschlikon - Zurich”
- 2008* Erasmus scholarship to study abroad at Istanbul Technical University
- 2007* Jakob Wilhelm Mengler-Award, for the project “Schichten”
- 2009* Scholarship Studienstiftung des Deutschen Volkes e.V.
- 2005 - 2009* Several student projects published and exhibited at Sichten 9- 13 and Exemplarisch

Teaching and academic work

- 2014 Teaching assistant, MIT 4.401 Environmental Technologies in Buildings
- 2014 Teaching assistant, MIT 4.433 Modeling Urban Energy Flows
- 2013 Teaching assistant, MIT 4.433 Modeling Urban Energy Flows
- 2012 Teaching assistant, Harvard GSD, 06122: Energy, Technology and Building (SCI 0612200)
- 2006 - 2010 Teaching and research assistant, Department of Construction and Technology at TU Darmstadt, Prof. Wolfgang Lorch
- 2006 - 2010 Course instructor for CAD and 3D modeling at the Department of Digital Design and Art, TU Darmstadt, Prof. Manfred Koob
- 2010 Teaching assistant, Urban Planning at TU Darmstadt, Prof. Markus Gasser
- 2010 "Studio Istanbul" for Department of Construction and Technology at TU Darmstadt

Initiation and organization of a design studio including a field trip and collaborative workshop with Istanbul Technical University
- 2009 Elected student representative, TU Darmstadt

Invited lectures and presentations

- 2014 Invited presentation on "Building technology and simulation methodologies" at TC Erciyes University, Kayseri, Turkey
- 2013 Invited lecturer and course instructor at the "active buildings – active cities" summer school at TU-Darmstadt
- 2013 Invited guest lecturer in "Energy Simulation in Design" at Harvard Graduate School of Design

Non academic professional activity

- since 2014 Interdisciplinary laboratory for TC Erciyes University, Kayseri, Turkey. (12,000m²)
Commissioned architect and sustainability consultant
- since 2014 Member of the DIVA for Rhino developer team. www.diva4rhino.com
 - 2013 Patent for Dynamic Light Control System and Methods for Producing the Same. Appl. No(s): PCT/US13/70622 at the Harvard Wyss Institute.
- since 2012 Member of the "umi" developer team (urban environmental modeling software), www.urbanmodeling.net
- since 2012 Lead developer of "Archsim Energy Modeling" software for Grasshopper, www.archsim.com
- since 2011 Lead developer of "Urban Daylight" simulation software for Rhino and Grasshopper, www.archsim.com

Skills

- Languages:* English: "English for Design" certificate from Harvard, French: "Attestation Francophone" de l'Université de Genève, Turkish: TÖMER

Publications

Books:

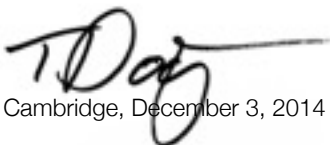
- 2008 T Dogan et al., "Concerning Istanbul", Entwerfen und Hochbaukonstruktion, TU Darmstadt, ISBN: 978 3 88536 107 7
- 2008 T Dogan, K Kral, "anSICHTEN, Katalog zur Jahresausstellung 2008 des Fachbereichs Architektur der TU Darmstadt", Wasmuth, Tübingen 2008, ISBN: 978 3 8030 0701 8

Journal articles:

- 2014 T Dogan, C F Reinhart, "Autozoner: An algorithm for automatic thermal zoning of buildings with unknown interior space definitions", submitted to Journal of Building Performance Simulation
- 2011 C F Reinhart, T Dogan, D Ibarra and H W Samuelson, "Learning by doing - Teaching energy simulation as a game", Journal of Building Performance Simulation, October 2011. doi:10.1080/19401493.2011.619668

Peer reviewed conference proceedings:

- 2014 C Cerezo, T Dogan, C Reinhart, "Towards standardized building properties template files for early design energy model generation", Proceedings of 2014 ASHRAE/IBPSA-USA Building Simulation Conference, Atlanta, USA
- 2014 T Dogan, C F Reinhart, P Michalatos, "Automated multi-zone building energy model generation for schematic design and urban massing studies", Proceedings of eSIM 2014, Ottawa, Canada
- 2013 C F Reinhart T Dogan, J A Jakubiec, T Rakha, and A Sang, "UMI. An urban simulation environment for building energy use, daylighting and walkability", Proceedings of Building Simulation 2013, Chambéry, France, August 2013
- 2013 T Dogan and C F Reinhart, "Automated conversion of architectural massing models into thermal "shoebox" models", Proceedings of Building Simulation 2013, Chambéry , France, August 2013
- 2013 T Dogan, CF Reinhart, "Atmospheres: Proof of concept for web-based 3D Energy Modeling for designers with WebGL/HTML5 and modern event-driven, asynchronous server systems.", Proceedings of Building Simulation 2013, Chambéry , France, August 2013
- 2012 T Dogan, C F Reinhart and P Michelatos, "Urban daylight simulation: Calculating the daylit area of urban designs", Proceedings of SimBuild 2012, Madison, Wisconsin, USA
- 2012 B Wang, T Dogan, D Pal and C F Reinhart, "Simulating naturally ventilated buildings with detailed CFD-based wind pressure database", Proceedings of SimBuild 2012, Madison, Wisconsin, USA



Cambridge, December 3, 2014